## ABSTRACT OF THE DISCLOSURE

In a method of sterilization or enzyme inactivation for a liquid food with supercritical carbon dioxide, used is a sterilization apparatus not requiring any large-size pressure tanks for contact of the liquid food with carbon dioxide therein. The apparatus comprises (A) a high-performance pressure mixer for mixing the liquid food and carbon dioxide therein, (B) an accumulator (pressure pipe) and (C) a pressure-resistant carbon dioxide releaser that are so planned as to be resistant to a pressure not lower than the critical pressure of carbon dioxide and are connected in series in that order, in which the inner temperature of the high-performance pressure mixer and the accumulator is kept all the time not lower than the critical temperature of carbon dioxide.